Psychological assessments shown to be as valid as medical tests

A recent report indicates that psychological assessments are just as predictive of specific, measurable outcomes—sometimes even more predictive—as many medical tests.

BY JENNIFER DAW Monitor staff

The long-held assumption has been that medical tests—from MRIs, to Pap smears, to electrocardiograms—provide data that are more reliable or valid than the conclusions of any psychological assessments.

A report from APA's Psychological Assessment Work Group (PAWG), however, is proving that hypothesis wrong.

"Psychological test validity is nothing to scoff at," says psychologist Greg Meyer, PhD, of the University of Alaska–Anchorage, and member of PAWG. "In fact, when we look at the things we study relative to other domains, we're doing a good job."

In response to increasing challenges to the utility of psychological testing and assessment, and to declining use of these instruments, APA's Board of Professional Affairs formed PAWG to determine the efficacy of assessment in clinical practice.

The report, which appeared in American Psychologist (Vol. 56, No. 2), was written by Meyer, along with Stephen Finn, PhD, Lorraine Eyde, PhD, Gary Kay, PhD, Kevin Moreland,

PhD, Robert Dies, PhD, and Elena Eisman, PhD—all members of PAWG—and Tom Kubiszyn, PhD, and Geoffrey Reed, PhD, of APA.

"The implications of these data are really much broader than just psychological assessment," says Reed, assistant executive director for professional development in APA's Practice Directorate. "Psychologists have simply accepted, and even believed, negative comparisons of the empirical basis for psychological assessment and interventions to medical ones. This report helps us debunk the myth that we lack an evidentiary foundation."

Evidence of assessment efficacy

Through meta-analytic reviews, Meyer and his colleagues drew comparisons between medical test validity and psychological test validity. They found that both psychological and medical tests

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have varying degrees of validity and that validity co-efficients for many psychological tests are indistinguishable from those of medical tests.

For example, psychological tests such as the Millon Clinical Multiaxal

Inventory, the Thematic Apperception Test, the Hare Psychopathy Checklist and other neurological and cognitive tests produce medium to large effect sizes, as do medical tests such as Pap smears, mammography, magnetic resonance imaging (MRI) and electrocardiograms. More specifically, for example, MMPI scale scores and average ability to detect depressive or psychotic disorders generates an effect size of 0.37. The use of a Pap test to detect cervical abnormalities produces an effect size of 0.36. The effectiveness of these very different tests used to detect very different outcomes is much the same.

Conversely, some psychological tests work just as well as medical tests to detect the same outcome. The authors note, for instance, the ability to detect dementia is as good with neuropsychological tests as it is with MRI.

"For those of us in the field trying to get pre-approval from managed-care

companies, these figures give us some ammunition," says Stephen Finn, PhD, of the Center for Therapeutic Assessment in Austin, Texas, who chaired PAWG. "There's this idea that medical tests are wonderful and psychological tests are bad. The report shows the bias and takes away a context and rationale used to deny psychological testing."

What's next

But even though psychological assessments are just as valid as medical tests, fewer are being used due to pressures from managed care and reimbursement struggles, the report's authors say.

About 81 percent of APA clinical psychologists spend between zero and four hours per week in assessment, says Meyer. Approximately 80 percent of neuropsychologists spend more than five hours per week doing testing and

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assessment, he adds. "Practitioners are not getting paid for all the time it takes to do assessment," he says.

In fact, says a report in the April 2000 Professional Psychology: Research and Practice, some managed-care organizations pay less per hour for psychological assessment than for individual therapy. Most reimbursement issues crop up around the amount of time needed to perform assessments. The time allocated by third-party payers to administer, score and interpret tests can be less than needed to simply administer a test.

"The report itself won't influence

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reimbursement," notes Finn. "But practitioners can use this information with gatekeepers or employers who are buying insurance coverage."

"These arguments have been used by managed-care organizations to tighten authorization and reimbursement for psychological services, when these same companies would be much less likely to try to deny authorization for medical tests or procedures, even when they are no more strongly related to the outcomes of interest," says Reed.

In addition to being part of an arsenal practitioners can use in their

efforts to gain reimbursement, the report may trigger more research as well as an upswing in testing and assessment training.

"This outlines where we need to go in the future," says Meyer. "We need to start addressing some of the bigger issues that have not been the focus of psychological testing."

The next step, he explains, is to look at the real-world value of using psychological assessment measures. "We need more information about whether or not we're providing value to clients and referral sources." \(\text{\Psi} \)

Sample effect sizes for psychological and medical tests

MMPI Ego Strength scores and subsequent psychotherapy outcome Routine ultrasound examinations and successful pregnancy outcomes ological test Beck Hopelessness scores and subsequent suicide Ventilatory lung function test scores Medical test and subsequent lung cancer Neuroticism and decreased subjective well-being Screening mammogram results and detection of breast cancer within two years Expressed emotion on the CFI and subsequent relapse in schizophrenia and mood disorders CT results and detection of aortic injury Long-term verbal memory tests and differentiation of dementia from depression Exercise ECG results and identification of coronary artery disease MMPI Validity scales and detection of malingered psychopathology Creatinine Clearance test results and kidney function

Source: Psychological Testing and Psychological Assessment, American Psychologist, Feb. 2001, pp. 136–143, Table 2.

0.4

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